

which contains resin, harder and darker; it has no larger transverse septa; but the lesser exhibit, when the wood is smoothed across the growth, a small and beautiful mottling. The grain is straight, and in texture nearly uniform; it is light and easily worked, splits readily, and is rather brittle; it is somewhat bitter to taste, and has a strong and peculiar odour; qualities which effectually fortify it against worms and insects: this exemption, together with its toughness and durability, are the chief properties it possesses—both the latter existing in it to a very high degree: those of strength and stiffness, especially the latter, it is materially deficient in; which renders it therefore unfit for carpentry; it is very useful, however, in cabinet-making, whether for interior fittings, or the outside shell; the figured portions, in particular, being very beautiful when brought to the smooth surface, and high polish of which the wood is susceptible.

(To be continued.)

RETROSPECTIVE ARCHITECTURAL LITERATURE.

COLLECTED BY SIR HENRY WOTTON, KNIGHT.

From the best Authors and Examples.

THE ELEMENTS OF ARCHITECTURE.

I SHALL not need (like the most part of Writers) to celebrate the Subject which I deliver; in that Point I am at Ease: For Architecture can want no Commendation, where there are noble Men, or noble Minds: I will therefore spend this Preface rather about those from whom I have gathered my Knowledge: For I am but a Gatherer and Disposer of other Men's Stuff at my best Value.

Our principal Master is Vitruvius, and so I shall often call him, who had this Felicity, that he wrote when the Roman Empire was near the Pitch; or at least, when Augustus (who favoured his Endeavours) had some Meaning (if he were not mistaken) to bound the Monarchy: This, I say, was his good hap, for in growing and enlarging Times, Arts are commonly drowned in Action: But on the other side, it was in truth an Unhappiness to express himself so ill, especially writing (as he did) in a Season of the ablest Pens; and his Obscurity had this strange Fortune, that though he were best practised and best followed by his own Countrymen, yet after the reviving and repolishing of good Literature (which the Combinations and Tumults of the middle Age had uncivilized) he was best, or at least, first understood by Strangers: For of the Italians that took him in hand, those that were Grammarians seem to have wanted Mathematical Knowledge, and the Mathematicians perhaps wanted Grammar, till both were sufficiently conjoined in Leon Baptista Alberti the Florentine, whom I repute the first learned Architect beyond the Alps; but he studied more indeed to make himself an Author, than to illustrate his Master: Therefore among his Commenters, I must (for my private Conceit) yield the chief Praise unto the French, in Philander; and to the High-Germans, in Gunterus Rivius, who, besides his Notes, hath likewise published the most elaborate Translation that I think is extant in any vulgar Speech of the World, though not without bewailing now and then, some Defect of artificial Terns in his own, as I must likewise: for if the Saxon (our Mother Tongue) did complain; as justly (I doubt) in this Point may the Daughter: Languages for the most part, in Terms of Art and Erudition, retaining their original Poverty, and rather growing rich and abundant in complementary Phrases, and such Froth. Touching diverse modern Men, that have written out of meer Practice, I shall give them their Due upon Occasion.

And now, after this short Censure of others, I would fain satisfy an Objection or two, which seem to lie somewhat heavily upon my self: It will be said that I handle an Art no way suitable either to my Employments, or to my Fortune; and so I shall stand charged both with Intrusion and with Impertinency.

To the First I answer, That though by the ever-acknowledged Goodness of my most dear and gracious Sovereign, and by his long indulgent Toleration of my Defects, I have born Abroad some part of his Civil Service; yet when I came Home, and was again resolved into my own Simplicity, I found it fitter for my Pen (at least in this first publick Adventure) to deal with these plain Complements,

and tractable Materials, than with the Labyrinths and Mysteries of Courts and States; and less Presumption for me, who have long contemplated a famous Republick, to write now of Architecture, than it was anciently for Hippodamus the Milesian to write of Republicks, who was himself but an Architect.

To the Second, I must shrink up my shoulders, as I have learned Abroad, and confess indeed, that my Fortune is very unable to exemplify and actuate my Speculations in this Art, which yet, in truth, made be rather, even from my very Disability, take Encouragement to hope that my present Labour would find the more Favour with others, since it was undertaken for no Man's sake less than mine own: And with that Confidence I fell into these Thoughts, of which there were two Ways to be delivered: The one Historical, by Description of the principal Works performed already in good part by Giorgio Vasari, in the Lives of Architects: The other Logical, by casting the Rules and Cautions of this Art into some comfortable Method, whereof I have made choice, not only as the shortest and most elemental, but indeed as the soundest: For though in practical Knowledges every compleat Example may bear the Credit of a Rule, yet, peradventure, Rules should precede, that we may by them be made fit to judge of Examples. Therefore to the Purpose, for I will Preface no longer.

PART I.—In Architecture, as in all other Operative Arts, the End must direct the Operation.

THE END IS TO BUILD WELL.

Well Building hath three Conditions; Commodity, Firmness, and Delight.

A common Division among the Deliverers of this Art, though I know not how somewhat misplaced by Vitruvius himself, (Lib. 1, Cap. 3.) whom I shall be willing to follow, as a Master of Proportion than of Method.

Now, for the attaining of these Intentions, we may consider the whole Subject under two General Heads:

THE SEAT, AND THE WORK.

Therefore, first touching Situation.

The Precepts thereunto belonging, do either concern the Total Posture, (as I may term it) or the placing of the Parts: Whereof the first Sort, howsoever usually set down by Architects as a Piece of their Profession, yet are in truth borrowed from other Learnings; there being between Arts and Sciences, as well as between Men, a kind of good Fellowship, and Communication of their Principles.

For you shall find some of them to be merely Physical, touching the Quality and Temper of the Air; which being a perpetual Ambient and Ingredient, and the Defects thereof incorrigible in single Habitations (which I most intend) doth in those Respects require the more exquisite Caution: That it be not too gross, nor too penetratious, not subject to any foggy Nuisomeness from Fens or Marshes near adjoining, nor to mineral Exhalations from the Soil itself: not undigested for want of Sun; not unexercised for want of Wind; which were to live (as it were) in a Lake, or standing Pool of Air, as Alberti, the Florentine Architect, doth ingeniously compare it.

Some do rather seem a little Astrological, as when they warn us from Places of malign Influence, where Earthquakes, Contagions, Prodigious Births, or the like, are frequent, without any evident Cause; whereof the Consideration is, peradventure, not altogether vain: Some are plainly Oeconomical; as that the Seat be well watered and well fuelled; that it be not of too steepy and incommodious Access, to the Trouble both of Friends and Family; that it lie not too far from some Navigable River, or Arm of the Sea, for more Ease of Provision, and such other Domestic Notes.

Some again may be said to be Optical; such I mean, as concern the Properties of a well-chosen Prospect, which I will call the Royalty of Sight: For as there is a Lordship (as it were) of the Feet, wherein the Master doth much joy when he walketh about the Line of his own Possessions; so there is a Lordship likewise of the Eye, which being a ranging, and imperious, and (I might say) an usurping Sense, can endure no narrow Circumscription, but must be fed both with Extent and Variety: Yet on the other side, I find vast and inde-

finite Views, which drown all Apprehension of the uttermost Objects, condemned Authors, as if thereby, some part of the sure (whereof we speak) did perish. I remember a private Caution, which not well how to sort, unless I should Political, by no means to build too near Neighbour; which were, in truth, to be fortunately seated on the Earth, as Men in the Heavens, for the most part ever in bustion or Obscurity, under brighter than his own.

From these several Knowledges, as said,* and perhaps from some other, Architects do derive their Doctrines about Elements, Seats, wherein I have not been so great Scholar of our Time, who prestraineth a perfect Situation, at least main Point of Health, *Ad locum contra Sol radios suos fundit cum sub Ariete* that is, in a word, He would have the situation of the Spring. But such Nature, whosoever we find them in slight Authors, are, to my Conceit, Wishes than Precepts; and in that Quality will pass them over. Yet I must write that in the Seating our selves (which is of Marriage to a Place) Builders should circumspect as Woodcocks, lest, when all that Doom befal us, † which our Master lay upon Mytelene: A Town, in truth be) finely built, but foolishly planted. much touching that which I termed the Posture.

The next in Order, is the placing of Parts; about which (to leave as little as in my present Labour, unto Fancy, wild and irregular) I will propound a mine own Collection, upon which I fell manner: I had noted, that all Art was truest Perfection, when it might be reduced some natural Principle: For what a most judicious Artizans, but the Mimi Nature? This led me to contempla Fabrick of our own Bodies, wherein the Architect of the World hath displayed Skill, as did stupify all humane Reason: I found the Heart, as the Fountain or placed about the Middle, for the more Communication of the vital Spirits; the seated aloft, that they might describe greater Circle within their View; the projected on each Side, for ease of Reach Briefly (not to lose ourselves in this speculation) it plainly appeareth as a drawn from the divine Light, that the of every Part is to be determined by the

So then from natural Structure to p artificial, and in the rudest Things, I serve some Image of the excellentest, the principal Chambers of Delight, all S and Libraries be towards the East; Morning is a Friend to the Muses. All that require Heat, as Kitchens, Still Stoves, Rooms for Baking, Brewing, W or the like, would be Meridional. Al need a cool and fresh Temper, as C Pantries, Butteries, Granaries, to the N To the same side likewise, all that pointed for gentle Motion, as Galleries, cially in warm Climes, or that otherwise a steady and unvariable Light, as cothecia (saith Vitruvius) by which I tendeth (if I may guess at his Greek, must do often even at his Latin) certain positivities for Works of Rarity, in Pict other Arts, by the Italians called St which at any other Quarter, where the C of the Sun doth diversify, the Shadows lose much of their Grace: And by this having always regard to the Use, any Part may be fitly accommodated.

I must here not omit to note, that the ancient Grecians and the Romans, by their ample in their Buildings abroad, where Seat was free, did almost religiously set the Front of their Houses towards the S perhaps that the Master's Eye, when he home, might not be dazzled, or that illustrated by the Sun, it might yield the graceful Aspect, or some such Reason. from this the modern Italians do vary, wh I shall speak more in another Place. Let much suffice at the present, for the Po of the several Members, wherein must be as our Author doth often insinuate, and cially, (Lib. 6, Cap. 10.) a singular rega

* Joanneo Hurnius Instic. Medicin. Lib. 7, Cap. 2.

† Oppidum quidem edificatum elegantior sed imperpositum.

* Tacit. Lib. 1, Annal.

* Aristot. 2. Lib. Polit. Cap. 6.